AMENDMENTS TO THE CLAIMS

Please cancel Claims 1-4 without prejudice or disclaimer of the subject matter contained therein, and add new Claims 5-14 as follows:

Claim 1 (Canceled).

Claim 2 (Canceled).

Claim 3 (Canceled).

Claim 4 (Canceled).

Claim 5 (New) A tuned mass damper, comprising:

a mass having predetermined inertia properties; and

a plurality of isolators arranged in a hexapod configuration, each isolator having at least a first end and a second end, each isolator first end coupled to the mass and each isolator second end adapted to couple to a structure that may experiences vibrations in six independent degrees of freedom,

wherein each of the isolators, in combination with the mass, is individually tuned to reduce the vibrations experienced by the structure.

Claim 6 (New) The damper of Claim 5, wherein each if the isolators, in combination with the mass, is individually tuned to reduce a particular vibration frequency.

Claim 7 (New) The damper of Claim 6, wherein each of the isolators, in combination with the mass, is individually tuned such that a combination of two or more isolators reduces a particular frequency.

Claim 8 (New) The damper of Claim 5, wherein:

each isolator comprises a spring having an adjustable spring constant;

each isolator second end is adapted to couple to the structure at a predetermined location thereon; and

each isolator is individually tuned by adjusting its spring constant and the predetermined location on the structure to which its second end will couple.

Claim 9 (New) The damper of Claim 5, wherein each isolator comprises:

a tubular damping strut coupled between the isolator first and second ends;

a first spherical pivot coupled to the isolator first end; and

a second spherical pivot coupled to the isolator second end.

Claim 10 (New) In a system including at least a structure that experiences vibrations in six degrees of freedom, a tuned mass damper comprising:

a mass having predetermined inertia properties; and

a plurality of isolators arranged in a hexapod configuration, each isolator having at least a first end and a second end, each isolator first end coupled to the mass and each isolator second end coupled to the structure,

wherein each of the isolators, in combination with the mass, is individually tuned to reduce the vibrations experienced by the structure.

Claim 11 (New) The damper of Claim 10, wherein each if the isolators, in combination with the mass, is individually tuned to reduce a particular vibration frequency.

Claim 12 (New) The damper of Claim 11, wherein each of the isolators, in combination with the mass, is individually tuned such that a combination of two or more isolators reduces a particular frequency.

Claim 13 (New) The damper of Claim 10, wherein:

each isolator comprises a spring having an adjustable spring constant;

each isolator second end is adapted to couple to the structure at a predetermined location thereon; and

b1 cont

each isolator is individually tuned by adjusting its spring constant and the predetermined location on the structure to which its second end will couple.

a2 cont

Claim 14 (New) The damper of Claim 10, wherein each isolator comprises:

a tubular damping strut coupled between the isolator first and second ends;

a first spherical pivot coupled to the isolator first end; and

a second spherical pivot coupled to the isolator second end.